



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,754	07/31/2003	Bruce H. Hanson	02890069AA	2023

7590 09/11/2006

Andrew M. Calderon  
Greenblum and Bernstein P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191

EXAMINER

HAGEMAN, MARK

ART UNIT PAPER NUMBER

3653

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/630,754

Applicant(s)

HANSON ET AL.

Examiner

Mark Hageman

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6-7-2006.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by De Leo et al. The reference discloses a plurality of input feeding devices ( $F_1$ ,  $F_2$ ) each randomly receiving products from a stream of product; a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase (U) and a second pass phase ( $W_a$ ,  $W_b$ ), the plurality of input feeding devices feeding the product to a plurality of output bins of the plurality of output groups; and a control having a first mode of operation (Fig. 1a) and a second mode of operation (Fig. 1b) for the first pass phase and the second pass phase, respectively, wherein in the first mode, the control allows all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase ( $U_i$ ), and in the second mode, the control constrains placement of the products to output groups ( $W_a$ ,  $W_b$ ) assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase (col. 3, lines 10+; col. 5, lines 10+).
3. With regards to claim 2, the reference further discloses the control, in the first mode, allows the products fed from any of the plurality of input feeding devices access

to any output group of the plurality of output groups based on a code of the products (col. 3, lines 10+; col. 5, lines 10+).

4. With regards to claim 3, the reference further discloses the control assigns each input feeding device to an associated particular output group of the plurality of output groups (col. 3, lines 10+; col. 5, lines 10+).

5. With regards to claim 4, the reference further discloses the products, in the second pass phase, are fed through each of the assigned input device to each of the associated particular output group (col. 3, lines 10+; col. 5, lines 10+).

6. With regards to claim 5, the reference further discloses each of the assigned output groups has a plurality of output bins such that, in the second pass phase, the products placed in the output bins of the each associated assigned output groups are fed to the each corresponding assigned input feeding device in a sequential order of the output bins in the each assigned output groups (col. 3, lines 10+; col. 5, lines 10+).

7. With regards to claim 6, the reference further discloses the plurality of input devices is equal to the plurality of output groups (co. 2, lines 25+).

8. With regards to claim 7, the reference further discloses the control maintains a same grouping of output bins between the first pass phase and the second pass phase (col. 3, lines 10+; col. 5, lines 10+).

9. With regards to claim 8, the reference further discloses the control constrains each of the input feeding devices, on the second pass phase, to feeding product, received from a previously assigned output group maintained from the first pass phase, to a same output group in the second pass phase (col. 3, lines 10+; col. 5, lines 10+).

Art Unit: 3653

10. With regards to claim 9, the reference further discloses the each output group of the plurality of output groups is designated for a number of routes (col. 3, lines 10+; col. 5, lines 10+).

11. With regards to claim 10, the reference further discloses the plurality of input feeding devices is at least two input feeding devices (col. 3, lines 10+; col. 5, lines 10+).

12. With regards to claim 11, the reference further discloses the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices (col. 3, lines 10+; col. 5, lines 10+).

13. With regards to claim 12, the reference further discloses the products are mail pieces (col. 3, lines 10+; col. 5, lines 10+).

14. With regards to claim 13, the reference further discloses a plurality of input feeding devices each randomly receiving products from a stream of product; a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the products to output bins of the plurality of output groups; and a control allowing all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase and assigning contiguous output bins to predetermined output groups of the plurality of output groups and associating each of the predetermined output groups with respective input feeding devices such that the predetermined output groups remain constant between the first pass phase and the second pass phase (col. 3, lines 10+; col. 5, lines 10+).

Art Unit: 3653

15. With regards to claim 14, the reference further discloses the control constrains placement of the products to the predetermined output groups assigned in the first pass phase during the second pass phase such that the groupings of the products remain constant between the first pass phase and the second pass phase (col. 3, lines 10+; col. 5, lines 10+).

16. With regards to claim 15, the reference further discloses the products, in the second pass phase, are fed through the respective input feeding devices to the associated predetermined output groups (col. 3, lines 10+; col. 5, lines 10+).

17. With regards to claim 16, the reference further discloses the products are mail pieces (col. 3, lines 10+; col. 5, lines 10+).

18. With regards to claim 17, the reference further discloses providing a plurality of product from a stream of product to any of a plurality of input devices; feeding each of the plurality of product, in a first pass phase, to an assigned group of output bins of a plurality of output groups based on a code associated with the each of the product, the plurality of product being fed by the plurality of input devices; and assigning each of the plurality of input devices to each of the assigned group of output bins (col. 3, lines 10+; col. 5, lines 10+).

19. With regards to claim 18, the reference further discloses the step of constraining placement of the plurality of product during a second pass phase to the assigned group of output bins such that the assigned group of output bins remain constant between the first pass phase and a second pass phase (col. 3, lines 10+; col. 5, lines 10+).

Art Unit: 3653

20. With regards to claim 19, the reference further discloses assigning each of the plurality of input devices to feed product of the plurality of product, during the second sort phase, to each of the assigned group of output bins (col. 3, lines 10+; col. 5, lines 10+).

21. With regards to claim 20, the reference further discloses the plurality of products are mail pieces (col. 3, lines 10+; col. 5, lines 10+).

22. Claims 1 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Walach. The reference discloses a plurality of input feeding devices (P) each randomly receiving products from a stream of product; a plurality of output groups (N) corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the product to a plurality of output bins of the plurality of output groups; and a control having a first mode of operation (120) and a second mode of operation (130) for the first pass phase and the second pass phase, respectively, wherein in the first mode, the control allows all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase, and in the second mode, the control constrains placement of the products to output groups assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

23. With regards to claim 2, the reference further discloses the control, in the first mode, allows the products fed from any of the plurality of input feeding devices access

Art Unit: 3653

to any output group of the plurality of output groups based on a code of the products (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

24. With regards to claim 3, the reference further discloses the control assigns each input feeding device to an associated particular output group of the plurality of output groups (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

25. With regards to claim 4, the reference further discloses the products, in the second pass phase, are fed through each of the assigned input device to each of the associated particular output group (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

26. With regards to claim 5, the reference further discloses each of the assigned output groups has a plurality of output bins such that, in the second pass phase, the products placed in the output bins of the each associated assigned output groups are fed to the each corresponding assigned input feeding device in a sequential order of the output bins in the each assigned output groups (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

27. With regards to claim 6, the reference further discloses the plurality of input devices is equal to the plurality of output groups (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

28. With regards to claim 7, the reference further discloses the control maintains a same grouping of output bins between the first pass phase and the second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

29. With regards to claim 8, the reference further discloses the control constrains each of the input feeding devices, on the second pass phase, to feeding product,



Art Unit: 3653

received from a previously assigned output group maintained from the first pass phase, to a same output group in the second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

30. With regards to claim 9, the reference further discloses the each output group of the plurality of output groups is designated for a number of routes (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

31. With regards to claim 10, the reference further discloses the plurality of input feeding devices is at least two input feeding devices (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

32. With regards to claim 11, the reference further discloses the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

33. With regards to claim 12, the reference further discloses the products are mail pieces (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

34. With regards to claim 13, the reference further discloses a plurality of input feeding devices each randomly receiving products from a stream of product; a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the products to output bins of the plurality of output groups; and a control allowing all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase and assigning

Art Unit: 3653

contiguous output bins to predetermined output groups of the plurality of output groups and associating each of the predetermined output groups with respective input feeding devices such that the predetermined output groups remain constant between the first pass phase and the second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

35. With regards to claim 14, the reference further discloses the control constrains placement of the products to the predetermined output groups assigned in the first pass phase during the second pass phase such that the groupings of the products remain constant between the first pass phase and the second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

36. With regards to claim 15, the reference further discloses the products, in the second pass phase, are fed through the respective input feeding devices to the associated predetermined output groups (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

37. With regards to claim 16, the reference further discloses the products are mail pieces (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

38. With regards to claim 17, the reference further discloses providing a plurality of product from a stream of product to any of a plurality of input devices; feeding each of the plurality of product, in a first pass phase, to an assigned group of output bins of a plurality of output groups based on a code associated with the each of the product, the plurality of product being fed by the plurality of input devices; and assigning each of the

Art Unit: 3653

plurality of input devices to each of the assigned group of output bins (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

39. With regards to claim 18, the reference further discloses the step of constraining placement of the plurality of product during a second pass phase to the assigned group of output bins such that the assigned group of output bins remain constant between the first pass phase and a second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

40. With regards to claim 19, the reference further discloses assigning each of the plurality of input devices to feed product of the plurality of product, during the second sort phase, to each of the assigned group of output bins (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

With regards to claim 20, the reference further discloses the plurality of products are mail pieces (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

### ***Response to Arguments***

41. Applicant's arguments filed 6-7-2006 have been fully considered but they are not persuasive. Applicant states, "De Leo does not disclose a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, wherein the plurality of input feeding devices feed the product to a plurality of output bins of the plurality of output groups." Examiner maintains that De Leo does disclose, a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase (U) and a second pass phase ( $W_a$ ,  $W_b$ ), the plurality of input feeding devices feeding the product to a plurality of output bins of the

Art Unit: 3653

plurality of output groups. The applicant also states, "De Leo does not disclose the control, in the second mode, which constrains placement of the products to output groups assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase, as recited in claim 1." Examiner maintains that De Leo does disclose, and in the second mode, the control constrains placement of the products to output groups ( $W_a$ ,  $W_b$ ) assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase (col. 3, lines 10+; col. 5, lines 10+). Applicant also states, "De Leo does not disclose assigning contiguous output bins to predetermined output groups." Examiner maintains that De Leo discloses, assigning contiguous output bins to predetermined output groups, as in fig 1 and fig 2 it can be seen that some bins after the first pass that only contain "a" items and other bins only contain "b" items. This relationship is maintained after the second pass.

42. Regarding the Walach reference applicant states, "Walach does not disclose a plurality of input feeding devices each randomly receiving products from a stream of product." Examiner maintains that Walach discloses, a plurality of input feeding devices (10) each randomly receiving products from a stream of product (c9 lines 33-35).

### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3653

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Hageman whose telephone number is (571) 272-3027. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCH



**PATRICK MACKEY**  
**PRIMARY EXAMINER**